

Choosing a Vendor for the JPL Enterprise Information Portal

**Knowledge Management
Navigation Team
Report on Portal Vendor
Selection Process**

4/12/00

Choosing a Vendor for the JPL Enterprise Information Portal

Our Task:

Develop an enterprisewide web gateway to JPL's Knowledge Resources that:

- Will allow JPL employees to more easily access information required to do their job.
- Will allow employees to customize the information available to them.
- Will provide an integrated view into JPL's information and knowledge resources - robust search capabilities
- The bottom line: will enable JPL employees to spend less time looking for useful, relevant information.

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Working Definition:

What is a Portal?

“Technology that consolidates, integrates, and concentrates data from multiple information sources to improve individual or group decision making.”

- Howard McQueen
McQueen Consulting

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Research Methodology for Due Diligence:

- Formulation of task goals and requirements
- Market survey of known vendors
- Submission of RFI
- Further research on RFI respondees
- Product demonstrations by most promising vendors
- Follow up research on supporting documentation
- Conclusions drawn to find “best match”

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Technical Evaluation Criteria

- Interoperability with JPL legacy systems and future additions
- Commitment to open standards
- Modular design
- Support for information publisher; publishing process simple to use

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Technical Evaluation Criteria

- Support for a variety of search engines which include content classification capabilities
- Depth of support to users and publishers
- Experience of key personnel
- Continuity and longevity of the implementation team
- Ability of the vendor to provide upgrades in a non-intrusive way

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Companies Researched:

- Sequoia
- Autonomy
- iPlanet
- Viador
- Sagemaker
- Datachannel
- Plumtree
- VIT DeliveryMANAGER
- Brio
- Oracle

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Research Results

- Refer to Portal Vendor Comparison Matrix

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Final Recommendation: iPlanet

Interoperability and Modular Design

- Offers an excellent portal infrastructure; can buy pieces as components, allowing for addition of other products down the road
- Strong partnerships including: Sun Netscape Alliance, Future Tense, Interwoven, news services, GrapeVINE Search Engine with Compass server, offers options for content management, collaboration and information classification

Commitment to Open Standards

- Platform independent, committed to open standards - ICE & XML

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Support for Publishers

- Excellent syndication of internal and external sources
- Super easy for information publishers to use
- Delegated administration allowing for easy set up of different portal views, ie organizational, project, communities

Support for Search Engines with Content Classification

- Comes with GrapeVINE Search Engine with Compass Server as content classification support
- Due to modular architecture, can use something else if we choose

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Final Recommendation: iPlanet

Depth of Support to Users

- Strong personalization functionality that is easy to set up
- A variety of security options that satisfy even JPL

Experience, Continuity, Longevity, Scalability

- Extremely scaleable with a lot of experience in hosting large, high traffic sites
- Multi hosting capabilities customized to JPL needs with full tech support 24 X 7
- Netscape's industry experience has allowed it to have unmatched continuity and longevity in its field.
- Market leader with a wealth of experience and stable technology

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Summary

No other vendor on the market meets all the criteria or has the technical experience of iPlanet.

- Netscape has been providing browser services since 1994
- MyNetscape online since 1997
- Currently 22 million registered users of Custom Netcenter
- No other vendor has a proven track record with that volume of users
- Netscape has numerous contracts with the US Government already and understands the dynamics of a gov't contract
- Company is strong financially and is going to be around in the future

Portal Vendor Comparison Sheet
Last Revised: 4/11/00

10/18/2001

Vendor	Interoperability	Search Engine	Content Mgmt	Platform/Hosting	Security	Conclusions
	Protocols supported; Platform independence	Which one and have meta search?	Tools for syndication/ platform independent/ web based?	What kind; extensibility	How do you handle this? Kerberos, PKI?	
iPlanet	Launches e-mail, calendar and MS apps from browser; platform independent; highly customizable; community enabling, uses XML apps	GrapeVINE's Compass server; e-mail notification, social filtering for rating of results, indexes wide variety of file formats; auto classification along taxonomy lines, can customize UI, alerts	Publishing process extremely easy for users; syndication of ext news feeds, services and JPL subscribed sources; Future Tense is an excellent product that can be "bolted on" next FY; also partner with Interwoven	Multi-hosting capabilities, delegated administration, Unix based, excellent extensibility, strong partners with market experience	Many avenues to implement security, LDAP based, VPN 'on the fly' authentication, light weight single sign on	Best of breed, experienced market leader with stable technology, Sun Netscape Alliance, quick to deploy, have worked with the government before
Sequoia	very open architecture; Uses XML wrappers to transport documents and data; can access MS, Oracle, Sybase, Lotus Notes; administration seems unwieldy	Proprietary search engine; Uses a meta search engine/ now partnering with Semio which uses phrasing in returns	uses Front Page and MS apps; basic document management system with versioning, etc.; uses "Smart Summary" for aggregation	Runs on NT server with SQL server software; uses a server farm for extensibility/ no hosting-use partner	provides a security subscription database for single sign on authentication; LDAP	Promising but very young co; already reorganized once; don't like use of NT servers, very MS centric
Autonomy	Knowledge Server monitors feeds from MS Exchange and Lotus Notes, and news feeds; builds user profiles and then finds info it thinks matches the profile; dynamic personalization	Intelligent agents that can be installed on your desk top and trained to bring back info the user wants; Dynamic Reasoning Engine	Monitors sources in the following formats: web pages, e-mail, pdf's, SQL/ODBC databases, Lotus Notes; has Content Server which is promising	Front End: NT server; back end: Solaris/ no hosting capabilities although does have partners (not identified)	Integration with LDAP security mechanisms: role based, password, cookies, encryption	Active Knowledge is interesting, but not enough to wrap an entire portal around; recommend for another task, frames
Viador	A "complete" solution; all pieces bundled and proprietary; ODBC, native Oracle drivers	Ultraseek	Can deal with all formats		LDAP approach; authentication, role based authorization, group privileges	Want \$ 400K for their total solution; not modular

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Vendor	Interoperability	Search Engine	Content Mgmt	Platform/Hosting	Security	Conclusions
Knowledge Track	Concentrates on ERP functions and getting distributors, suppliers, etc to be integrated	The Knowledge Center crawls through structured and unstructured data	uses MIME HTML for storing web pages; also uses meta data and XML for indexing	NT only; currently looking for beta testers for their Unix implementation		A portal designed for e-business transactions
Plumtree	No back end support; API's developed via "gadgets"; anecdotal research indicates that there is a very long lead time for a requested gadget	Uses Verity				Didn't respond to RFI; heard many negative comments from users
VIT Delivery MANAGER	Uses a meta data interchange hub and meta warehouse; GUI very MS Windows Explorer-like	information asst. that can draw on search engine that runs meta data crawlers or can also use the hyperbolic tree view of info	document management includes databases, word processing apps, email, XML, HTML, spreadsheets, and graphics; stores docs in topic collections			No support for Macs or Unix boxes; geared to facilitating business relationships
Other Vendors:						
Brio	E-business portal that facilitates financial transactions between distribution/manufacturing/supplier partners					
Sagemaker	Same as above except specializes in the oil industry					
Oracle	Uses third party developing kit to custom build each portal; not a true portal vendor					
Final Recommendation: iPlanet						
	The final decision is to approach iPlanet as the best match for our stated technical evaluation criteria, which include the following:					
Interoperability:	Platform independent; integrates well with office apps that are used daily, ie Eudora, Meeting maker, and MS Office apps. Excellent aggregation					
Open Standards	iPlanet uses XML and is committed to open standards; portal product is modular and can allow for "plugging in" of other products as time goes on					
Info Publisher Support	Publishing process is super simple and easy to learn; administration is delegated to allow for easy set up of groups or communities					

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Vendor	Interoperability	Search Engine	Content Mgmt	Platform/Hosting	Security	Conclusions
Search Engine	Supports Compass server on top of the GrapeVINE search engine, allows for information classification by taxonomy					
Experience, Scaleability	Highly experienced vendor with excellent working knowledge of net users and industry expectations; extremely good extensibility; strong partners					

	Channel	Description	Edit Capabilities
1	User Information	The User Information data channel provides a way for you to enter your personal information and have it stored by the portal for retrieval when you return. It will record your identity, timezone and e-mail address.	Change your personal information using the Edit button
2	Search JPL	This channel provides a simple search box that searches internal JPL web space. There is also an Advanced Search page available through this channel to provide more options for the power user.	None; for customized searches, use the Advanced Search page or the planned Personal Search Agents.
3	Search the Web	This channel provides a search box provided by the Google Search Engine that searches the World Wide Web.	None
4	Find a Person	This channel hooks up to the BOSS online white pages. It also displays a link to the NASA employee directory X.500 for finding NASA employees Agencywide.	None
5	Quick Links	This channel provides quick access to the most commonly used information repositories at JPL including directory information, location information and policy information.	Portal provided links may be added or deleted. For personal web sites used frequently, customize the My Bookmarks data channel.
6	My Bookmarks	The Bookmarks channel allows you to add bookmarks for favorite web pages to your portal page. Both internal and external web pages can be bookmarked.	Use the Edit button to add or remove your personal bookmarks.
7	Daily Planet	The Daily Planet channel carries the latest stories internal to JPL that impact our work. Publisher: Media Relations	None
8	Institutional News: Today@ JPL and Today@ NASA	This channel displays the latest press releases from the JPL home page and the NASA home page.	The Edit capability allows the user to show the dates that news stories were posted.
9	Labwide Announcements	Labwide Announcements displays messages to all JPL employees from both individual employees and the JPL Office of the Director	The Edit capability allows the user to show the dates that news stories were posted.

	Channel	Description	Edit Capabilities
10	This Week	The This Week data channel carries links to the latest edition of the weekly JPL newsletter.	None
11	My Data Channels (Division 32)	This data channel is designed to display information published by the sponsoring organization regarding their work and other relevant information. Publisher: Division 32; Point of contact: Wendy Masri (e-mail link)	None
12	Headline News - Aviation Week	This data channel displays aerospace headlines provided by Aviation Week Online.	The Edit capability allows the user to choose how many headlines should be displayed
13	Headline News - NY Times	This data channel displays general news headlines provided by the New York Times.	The Edit capability allows the user to choose how many headlines should be displayed
14	Headline News - Space.com	This data channel displays science and mission launch headlines provided by Space.com.	None
15	Weather and Traffic	The weather service is provided by the Weatherguys and displays current weather for the JPL zip code. An additional weather check is available through the link to the JPL Weatherstation. Also, available in this channel is a link to an external site which carries the traffic maps of the Greater Los Angeles area with incident reports that are dynamically updated	Can search for weather in a different area by entering a zip code in the box.
16	My Calendars	The calendar data channel carries links to event calendars that are of particular interest to the user.	The edit capability allows the user to choose which calendars they would like to have displayed in this channel.
17	JPL Web Space Directory	The JPL Web Space Directory contains links to well known, established sites that are helpful to JPL employees. Some of the sites may be NASA generated or externally generated. Browse the categories to find topical information.	None

	Channel	Description	Edit Capabilities
18	Project Libraries	This channel displays links to the user's project libraries for quick and easy reference.	The edit capability allows users to choose which project library links they would like displayed
19	Personal Searches	This channel displays results for personal search agents created and trained by users.	Autonomy allows many customizations. Please see the special help section for the search agents.
20	Engineering Links	This channel carries links of relevance to JPL engineering staff. Although the base set of links is fixed, the user may choose which of them is displayed. Also, if the staff of Inside JPL collects numerous requests over time for a particular site to be carried in this channel, we will add it as our maintenance schedule allows.	The edit capability allows the user to select which links from a fixed set to be displayed.
21	Science Links	This channel carries links of relevance to JPL science staff. Although the base set of links is fixed, the user may choose which of them is displayed. Also, if the staff of Inside JPL collects numerous requests over time for a particular site to be carried in this channel, we will add it as our maintenance schedule allows.	The edit capability allows the user to select which links from a fixed set to be displayed.
22	Business Links	This channel carries links of relevance to JPL administrative personnel. Although the base set of links is fixed, the user may choose which of them is displayed. Also, if the staff of Inside JPL collects numerous requests over time for a particular site to be carried in this channel, we will add it as our maintenance schedule allows.	The edit capability allows the user to select which links from a fixed set to be displayed.